

AMENDMENTS TO THE SPECIFICATION

Page 6, please amend the paragraph beginning at line 9.

As shown in Fig. 1, the satellite data-broadcasting/communication service includes a plurality of information providers 1a to 1n and a service operating company 2 that transmits information sent from the information providers 1a to 1n as broadcast data to a communications satellite 3. The data relayed by the communications satellite 3 are received by data receiving units for subscribers 4a to 4n. The data receiving units for the subscribers 4a to 4n are connected to the service operating company 2 by wired transmission channels 5 such as a public circuit network or dedicated lines, and information can be sent from each subscriber. The service operating company 2 is connected to the Internet 6, and various Internet information can be transmitted via the communications satellite 3.

Page 11, please amend the paragraph beginning at line 6.

The received information digitized by the satellite data capturer 21 are decoded by a data decoder 22. The data decoder 22 compares a media access control (MAC) address (destination address) in the MAC header of each received packet with a MAC address (i.e., an address set in the data receiving unit 20) designated by a controller 24 in the data receiving unit 20. When both MAC addresses match and the received packet is encrypted, the data decoder 22 performs decoding processing. When an address value exists which is equal to a MAC address

included in a packet in the controller 24, the address value means that "a decoding key for the decoding process ~~exists~~ exists". By using the decoding key, which is paired with the MAC address beforehand, the received packet is decoded.

Page 17, please amend the paragraph beginning at line 21.

The decoding-key retrieving unit 42 compares a MAC address in the MAC header of a packet received from the satellite data capturer 21 with a MAC address preset in the controller 24. When both MAC addresses coincide with each other, the decoding-key retrieving unit 42 reads a decoding key corresponding to the MAC address from the decoding-key holding unit 43 (since the decoding-key holding unit 43 must ~~holds~~ hold the MAC address and the decoding key in the form of a pair).

Page 19, please amend the paragraph beginning at line 19.

The decoder unit 44 uses the decoding key received from the decoding-key retrieving unit 42 to decode the simultaneously received data packet. If the decoding-key retrieving unit 42 receives no "decoding command", it ignores the decoding key and allows the received packet to pass through it. The mentioned decoding of encryption is basically based on a "secret-key encryption method". After decoding by the decoder unit 44, the packet decoded when the decoder unit 44 receives either the "decoding command" or the packet allowed to pass when the decoder unit 44 does not receive the "decoding command" is transferred to the decoded data diagnosis unit 45. The decoder unit 44 does

not transfer the decoding key, deletes it, and awaits the input of the next packet.

Page 20, please amend the paragraph beginning at line 9.

The decoded data diagnosis unit 45 performs examination of whether the packet transferred from the decoder unit 44 "has been normally decoded". Only when having determined that "decoding has been normally performed", the decoded data diagnosis unit 45 transfers the next data to the data storage unit 46. When having determined that "decoding has not been normally performed", the decoded data diagnosis unit 45 deletes the packet.

Page 20, please amend the paragraph beginning at line 17.

The examination process by the decoded data diagnosis unit 45 is performed by whether a decoding diagnosis code added to the end of each packet represents a constant determined beforehand by the transmitting and receiving systems. In other words, because the transmitting system encrypts the decoding diagnosis code added as a constant to the end of each packet by using a key identical to that with which the payload part of the packet is encrypted, the decoding diagnosis code must be reproduced when the correct key is used in correct decoding. If the correct decoding has not been performed, the decoding diagnosis code has an expected unexpected value, which indicates that the entire packet has not been normally decoded.